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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,769	02/24/2004	Koichiro Kishima	SON-2324/DIV1	8332
23353	7590	09/21/2004	EXAMINER	
RADER FISHMAN & GRAUER PLLC			CHOI, WILLIAM C	
LION BUILDING			ART UNIT	
1233 20TH STREET N.W., SUITE 501			PAPER NUMBER	
WASHINGTON, DC 20036			2873	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>10/784,769</b>	Applicant(s) KISHIMA ET AL.	
	Examiner William C. Choi	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/052,252.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/052,252, filed on January 23, 2002.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Eda et al (U.S. 5,728,509).

In regard to claims 9 and 16, Eda et al discloses a method of producing an optical lens (column 4, lines 31-41) / array (column 7, lines 57-62), comprising the steps of: forming, on a substrate made of an optical material (column 18, lines 1-2, Figure 4a, "40"), a mask layer corresponding to a shape of an optical lens having a pattern whose width in a first direction is different from a width thereof in a second direction perpendicular to the first direction (column 18, lines 2-6 and lines 52-59, Figure 4a, "42"); deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced (column 18, lines 17-29, Figure 4c, "42" and 4d, "42a"); and

Art Unit: 2873

removing the mask layer and the substrate simultaneously to transfer the shape of the mask layer to the substrate to form the shape of the optical lens (column 18, lines 39-46, Figure 4e, "12").

Regarding claim 10, Eda et al discloses wherein the mask layer is formed by performing a light-exposure and development process for a photosensitive material film to pattern the photosensitive material film (column 18, lines 2-16).

Regarding claim 11, Eda et al discloses wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature higher than a glass transition point of the photosensitive material film (column 18, lines 17-20).

Regarding claim 12, Eda et al discloses wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature lower than a carbonization temperature of the photosensitive material film (column 18, lines 17-20).

Regarding claim 13, Eda et al discloses wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature higher than a room temperature (column 18, lines 17-18).

Regarding claim 14, Eda et al discloses wherein, in the step of removing the mask layer and the substrate simultaneously, a dry etching process is performed using the mask layer as a mask to transfer the shape of the mask layer to the substrate to form the shape of the optical lens (column 18, lines 39-46).

Regarding claim 15, the dry etching process of Eda et al would inherently be performed in a condition that selection ratios for the substrate and the mask layer are substantially equal to each other, this being reasonably assumed from the complete shape transferal shown in Figure 4e.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Robello et al (U.S. 5,723,264), Nakai (U.S. 5,396,090), Basavanhally (U.S. 5,346,583) and Tsumori (U.S. 5,324,623) are being cited herein to show methods of producing optical lenses, which comprise the steps of the claimed invention. However, addition rejections would have been repetitive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Choi whose telephone number is (571) 272-2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

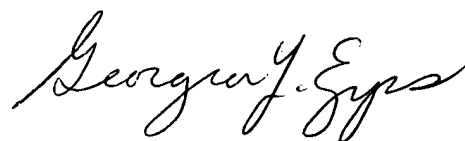
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2873

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*W.C.*  
William Choi  
Patent Examiner  
Art Unit 2873  
September 14, 2004



Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800